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VIA U.S. MAIL AND EMAIL

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Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai'i 96809

Dillingham Ranch Aina LLC
Kennedy-Wilson International
151 S. El Camino Drive
Beverly Hills, California 90212

RE: Objections to Application for Groundwater Use Permit No. 1088

Chair Case and Members of the Commission:

I write to you today in strong objection to the recent Public Notice of the grossly deficient Application for Groundwater Use Permit No. 1088 ("Application") submitted by Dillingham Ranch Aina LLC ("DRA"), both for myself personally and as a member and representative of a group of concerned interested parties referred to hereinafter as the Protect Mokuleia Hui ("PMH"). This Objection to proposed WUP No. 1088 is made pursuant to *Hawai'i Administrative Rules* ("HAR") § 13-171-18 on numerous grounds, as detailed herein.

I. SUFFICIENCY OF OBJECTION

As a preliminary matter, it should be noted that the ability of interested parties to acquire information about this application has been hampered if not completely obliterated by the State of Hawai'i Emergency Orders related to Covid-19, including the unilateral suspension of HRS Chapter 92F. I first reached out to the Commission by phone on March 12, 2020 when I saw this application listed in the Water Bulletin and requested the application and documents submitted in support of the application be provided. Despite further phone calls and numerous emails over the next two months, I was not able to obtain the Application until May 20, 2020.

To my knowledge, the only documents or information provided to the public regarding this application are (i) the Public Notice containing only the applicant name, well number, tax map keys (TMKs), and water quantity requested, and (ii) the Water Bulletin containing the same information along with "use descriptions" stating "irrigation citrus", "domestic", etc. Clearly this is not enough information to allow an interested party to properly analyze the facts, law, procedure, and policy associated with the application and state all grounds for objection, as is demanded by HAR § 13-171-18(b). And certainly not within the ten (10) day window provided, when an interested party is required

to investigate themselves and find all relevant information without the assistance of public records.

I specifically and unequivocally requested the application and accompanying documents on five (5) occasions – two (2) by phone and three (3) via email. On these grounds we object to any inference, conclusion, or decision finding that we have not properly objected pursuant to the relevant rules, as under the circumstances, no interested party could be expected to meet the burden without access to the pertinent information with a reasonable time to respond. Despite these unprecedented challenges, and having noted our objection to the circumstances and procedures heretofore, we have attempted to obtain all information through independent investigation and make these objections based on the limited information available to us at this time.

II. STANDING

MPH members are interested parties as defined in HAR § 13-167-54 on the basis of their property interests in the hydrologic unit, residency in the hydrologic unit, proximity of property interest to the hydrologic unit, and the particularized direct and immediate effect of the proposed change in groundwater use on certain of its members that is distinct from the effect on the general public. Furthermore, certain members of PMH are native Hawaiians whose substantial interest in exercising and protecting the resources necessary for the exercise of their Constitutionally protected traditional and customary practices will be directly and immediately adversely effected by the water use proposed in the Application. Granting the Application will result in decreased freshwater discharge into the nearshore marine area and prevents PMH's members from exercising traditional and customary practices like subsistence gathering. *In the Matter of the Contested Case Hearing on the Water Use Permit Application Filed by Kukui (Molokai), Inc.*, 116 Haw. 481, 508, 174 P.3d 320, 347 (2007) (“*Kukui*”); Haw. Rev. Stat. § 174C-101(c) (2017).

The pumping of wells on the DRA property, the permitting of additional withdrawals within the Mokuleia aquifer, and new uses of the pumped water will impact the ground water, nearshore marine resources, and related ecosystems that Protect Mokuleia Hui's members rely on, routinely use, or hope to use for fishing, swimming, agriculture, aquaculture, research, photography, educational programs, aesthetic enjoyment, traditional and customary Native Hawaiian practices, and other recreational, scientific, cultural, educational, and religious activities. Petitioners also have an interest in protecting endangered, plant, bird, aquatic, and marine species as part of their aesthetic, recreational, and ecological interests.

In addition, the Hawai'i Supreme Court recently considered article XI, section 9's “right to a clean and healthful environment,” and held that it provides a protectable property interest for due process purposes. *In re Application of Maui Elec. Co., Ltd.*, 141 Haw. 249, 253, 408 P.3d 1, 5 (2017). The court explained:

“These interests - property interests - may take many forms” because courts have long recognized that “property interests protected by procedural due

process extend well beyond actual ownership of real estate, chattels, or money.” *Bd. of Regents v. Roth*, 408 U.S. 564, 571-72, 576, 92 S.Ct. 2701, 33 L.Ed.2d 548 (1972). A property interest does not need to be “tangible” to be protected by the due process clause. Rather, a protected property interest exists in a benefit - tangible or otherwise - to which a party has “a legitimate claim of entitlement.” *Sandy Beach Def. Fund*, 70 Haw. at 377; 773 P.2d at 260 (quoting *Roth*, 408 U.S. at 577); ... [article XI, section 9] is a legitimate entitlement stemming from and shaped by independent sources of state law, and is thus a property interest protected by due process.

Id. at 12-13, 408 P.3d 260-61. Thus, Protect Mokuleia Hui’s members have specific, protectable rights under Hawai’i’s Water Code and Constitution. As set forth above, these members have specific legal interests in the land overlying or adjacent to the Mokuleia Aquifer and its ground water impacted by pumping the wells on the subject DRA property.

III. DRA’S APPLICATION SHOULD BE DENIED AS INCOMPLETE FOR FAILING TO MEET ITS BURDEN UNDER THE STATE WATER CODE

A. DRA’s Proposed Use is Not Reasonable-Beneficial

Water Use Permit applicants must “justify[] their proposed uses in light of protected public rights in the resource,” which includes proving that any proposed use is “such a quantity as is *necessary*” by “demonstrat[ing] their actual needs.” *Kukui*, 116 Haw. at 490, 174 P.3d at 329 (emphasis in original). Rather than basing its permit request on actual need, DRA appears to have compiled a wish list of speculative water use estimates calculated using “placeholder” crops and unreasonable uses such as irrigating with potable water, in an attempt to secure ‘vested rights’ to one of the most valuable and sensitive resources in the State. Despite requesting 0.417 MGD of freshwater, by any measure, DRA’s actual water need is far less.

The State Water Code requires an applicant to establish that a water use is “reasonable-beneficial” as defined by Hawai’i Revised Statutes § 174C-3, before the Commission will issue a WUP. Haw. Rev. Stat. § 174C-49(a)(2) (2017). DRA’s Application is, therefore, required to establish that its water uses are reasonable-beneficial. According to the Code, a “reasonable-beneficial use” is “the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest.” Haw. Rev. Stat. § 174C-3 (2017). This definition is consistent with the principle that water allocations reflect actual need and use. The Hawai’i Supreme Court highlighted four affirmative showings that permit applicants must make to carry their burdens under the public trust:

- (a) Permit applicants must demonstrate their actual needs and the propriety of draining water from public streams or aquifers to satisfy those needs.¹
- (b) The applicant must demonstrate the absence of a practicable alternative source.²
- (c) If there is a reasonable allegation of harm to public trust purposes, then the applicant must demonstrate that there is no harm in fact or that the requested use is nevertheless reasonable and beneficial.³
- (d) If the impact is found to be reasonable and beneficial, the applicant must implement reasonable measures to mitigate the cumulative impact of existing and proposed diversions and wells on trust purposes, if the proposed use is to be approved.⁴

Kauai Springs, Inc. v. Planning Comm'n of County of Kauai, 133 Haw. 141, 174-75, 324 P.3d 951, 984-85 (2014). Given these mandates, the Commission must take DRAs reduced operations and years of withdrawing only a fraction of its allocated amount into consideration when evaluating any future permit application. See *Kukui*, at 116 Haw. at 506, 174 P.3d at 345.

1. DRA may be awarded no more water than is necessary, and only upon demonstrating its actual needs

DRA's Application indicates that the total amount of water requested is 0.417 MGD. However, DRA currently holds (i) WUP No. 777 allowing Well 3310-02 to pump a maximum of 0.85 MGD of potable water, (ii) WUP No. 779 allowing Well 3410-03 to pump a maximum of 1.50 MGD of non-potable water, and (iii) WUP No. 813 allowing Well 3410-01 to pump a maximum of 0.50 MGD of potable water. DRA's Application states that the Application will "replace" WUP No. 813, "directly affect" WUP No. 776, and "modify" WUP 777, but does not indicate how or when those permits will be replaced, affected, or modified.

The Application does not indicate what uses these WUPs are currently serving or explain why DRA cannot accommodate the 0.417 MGD requested in the Application from its existing allocation of 2.5 MGD of water, of which it admits to currently using only 0.139 MGD. See DILLINGHAM RANCH FINAL EIS ("EIS") at Table 3.2. It is not clear if the Application seeks to allocate an additional 0.417 MGD to Wells 3310-01 and 3310-02 for a total of 1.267 MGD or if it replaces WUP 777 completely and reduces the allocation to 0.417 MGD.

The calculations in the Application used to arrive at the requested allocation are also materially inaccurate based on the information provided in the EIS. For example,

¹ *In re Water Use Permit Applications*, 94 Haw. 97, 162, 9 P.3d 409, 474 (2000) ("*Waiāhole I*").

² *Id.* at 161, 9 P.3d at 473.

³ *Kukui*, 116 Haw. at 499, 174 P.3d at 338.

⁴ *Waiāhole I*, 94 Haw. at 143, 161, 9 P.3d at 455, 473.

the Application bases the estimated water usage for irrigation of the 70 domestic lots on a 1,750 GPD/acre average with an assumption of a 2 acre lot. Application at 8, Table 1. But DRA knows that there is not a single lot in the subdivision that will be 2 acres. In fact, the EIS states that “the 70 agricultural lots will range in size from 2.24 to 428.856 acres. Sixty-six (66) lots range from 3 to 8 acres.” *EIS* at S-1. The engineering report for the subdivision indicates that the 70 house lots will be between 2.3 and 77 acres each. *EIS*, Preliminary Engineering Report, Appendix I, at 6, figure 1. Calculations using faulty assumptions such as this are not likely to be accurate and thus not likely to be determinative of the actual need of the Applicant.

DRA’s attempt to obtain an allocation beyond its actual use by adding to its existing yet continually unused allocation is not reasonable-beneficial. The Public Trust doctrine demands that Applicant be allocated no more water than is reasonably necessary. To the extent that DRA is attempting to obtain WUPs in sum total in excess of 0.417 MGD for the entire property, the use is not supported by the application. Any excess use beyond what is reasonably necessary damages the public trust resource. As such, DRA has not demonstrated its actual need for the requested amount, and the request should be denied.

2. DRA does not demonstrate the absence of practicable alternatives

Besides merely “advocating [for] the social and economic utility of their proposed uses” applicants must show that they cannot practicably mitigate the need and cannot get that needed water elsewhere with reasonable cost and effort. See *Waiahole I*, 94 Haw. at 161, 9 P.3d at 474. Demonstrating the absence of practicable alternatives, which could help mitigate the proposed water withdrawals, is intrinsic to the concept of the public trust and “an essential part of any balancing between competing interests.” *Waiahole I*, 94 Haw. at 161, 9 P.3d at 474. DRA fails to meaningfully explore alternative sources and methods of obtaining its desired water.

DRA’s cursory statement that “desalinization process [is] not used” does not meet its public trust obligation to demonstrate the absence of a practicable alternative source, nor does the conclusory statement that “no municipal source [is] present.” See Application at 7. In fact, the Application is patently deficient in that regard – no attempt to analyze alternatives or demonstrate the absence of practical alternatives is made at all. As such, DRA has not demonstrated the absence of a practicable alternative source, be it the water previously allocated to DRA, municipal water, desalinization, or otherwise.

DRA’s “failure to demonstrate the absence of practicable alternatives” must result in the denial of its permit application. *Kukui*, 116 Haw. at 496, 174 P.3d at 335. “The feasibility of a new . . . alternative source of water” must be “considered prior to the granting [of a permit] . . . not after the fact.” *Kukui*, 116 Haw. at 496, 174 P.3d at 335. “The Commission cannot fairly balance competing interests in a scarce public trust resource if it renders its decision prior to evaluating the availability of alternative sources of water.” *Id.* The discussion of alternatives in the Application is intentionally scant, does not represent the full panoply of options, and dismisses reasonable alternative sources in

an effort to save DRA money at the expense of important public trust resources and purposes within the Mokuleia Aquifer.

3. DRA's attempt to use valuable potable water constitutes impermissible waste of a valuable trust resource

Both the Commission and the Hawai'i Supreme Court have affirmed that the policy against waste prohibits the use of any water not otherwise needed. *Waiāhole I*, 94 Haw. at 156, 9 P.3d at 468. As the "primary guardian of public rights under the trust[.]" the law requires the proper permitting of all withdrawals and consumptive uses of water within a WMA. *Waiāhole I*, 94 Haw. at 143, 9 P.3d at 455. The Commission's public trust duties to Hawai'i nei's water resources do not tolerate over-allocation, waste, and unfettered commercial uses of water, especially in areas such as Mokuleia where fresh water sources are already limited.

The Application indicates that all proposed uses will be using potable water from Wells 3310-01 and 3310-02. Application at 1. This includes over 700 acres of irrigation for orchards and pasture land associated with the "farm dwelling" lots, approximately 150 acres of common interest orchard, the commercial polo venture, the commercial recreational lodge use, and road and landscape irrigation. However, non-potable water from the existing "Shop Well" could be used for irrigation given that many plants have a higher tolerance for chlorides than human drinking water standards.

The use of potable water for irrigation and commercial use in a Water Management Area with over 88% of the historically accepted sustainable yield already allocated is both unreasonably wasteful and improperly favors non-trust commercial purposes over protected instream uses and environmental protection of the resource. The Application fails or refuses to address why non-potable Well 3410-03 cannot serve these irrigation needs out of its permitted 1.50 MGD allocation.

The Public Trust includes an obligation to "protect and preserve water for domestic use by the public with a particular focus on protecting an adequate supply of drinking water." *Lana'ians for Sensible Growth v. Land Use Commission, et. al.*, SCOT-17-0000526, decided May 15, 2020, *19. Permitting DRA an indefinite license to irrigate its pastures, roadways, house lots, and landscaping using potable water would not adequately preserve the aquifer's drinking water supply in the long term "because, as technology develops and climate change likely fundamentally alters the availability of fresh water, 'brackish' water may become needed for domestic use. It would assuredly be counter to the State's public trust obligations to permit a private commercial" developer to irrigate its landscaping and polo horse pastures "with water that the public needs for daily living[.]" *Id.* at *20.

"[I]f the public trust is to retain any meaning and effect, it must recognize enduring public rights in trust resources separate from, and superior to, the prevailing private interests in the resources at any given time." *Waiāhole I*, 94 Haw. at 138, 9 P.3d at 450. The Commission's duty to protect and preserve drinking water in trust for future

generations inherently limits the Commission from authorizing the use of potable water for irrigation. See *Lana'ian for Sensible Growth* at *31. Therefore, the Commission may not grant any use of groundwater within the aquifer for irrigation purposes that may become needed for domestic use, i.e. fresh water or potable water.

Applicant's sole statement addressing its public trust duties and the reasonable-beneficial use of the resource reads, "[t]he proposed water system is private for domestic and agricultural use." This is woefully insufficient to meet the burden on Applicant. Accordingly, the Application should be denied unless Applicant can affirmatively show that there is in fact no harm or that the requested use is nevertheless reasonable and beneficial despite the harm caused.⁵ If the impact is found to be reasonable and beneficial, Applicant must implement reasonable measures to mitigate the cumulative impact of existing and proposed wells and water uses on trust purposes, if the proposed use is to be approved.

B. Petitioner's Proposed Use is Not consistent with County Land Use Plans

A "reasonable-beneficial use" of groundwater is "the use of [the] water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and **in a manner which is both reasonable and consistent with the state and county land use plans and the public interest.**" Haw. Rev. Stat. § 174C-3 (2017). Therefore, DRA's Application must be "consistent with the state and county land use plans" to satisfy the reasonable-beneficial statutory requirement prior to being issued a WUP. Despite receiving final subdivision plan approval, a ministerial act, the proposed subdivision is not consistent with the regional Development Plan, and is thus not consistent with county land use controls.

"[D]evelopment plans are relatively detailed schemes for implementing and accomplishing the development objectives and policies of the general plan within the several parts of the city." *Lum Yip Kee, Ltd. v. City and County of Honolulu*, 70 Haw. 179, 182 (1989). Regional Development Plans "have the force and effect of law and a proposed development which is inconsistent" with the regional Development Plan cannot be granted permits that require compliance with county land use controls. *GATRI v. Blane*, 88 Haw. 108, 115 (1998).

County zoning is governed by the Land Use Ordinance, Revised Ordinances, Chapter 21A. Zoning ordinances regulate the use of land within clearly demarcated zones and set detailed standards for the height, bulk, and location of buildings. The [County] Charter requires zoning ordinances to conform to and implement the development plan for that area.

Lum Yip Kee, Ltd. v. City and County of Honolulu, 70 Haw. 179, 183 (1989). (internal citations omitted).

⁵ *Kukui*, 116 Haw. at 499, 174 P.3d at 338.

[T]he actual physical development of a site is controlled by the development plan for the area in which the site is located and its zoning. *Protect Ala Wai Skyline v. Land Use and Controls Committee of the City Council of City and County of Honolulu*, 6 Haw.App. 540, 548, 735 P.2d 950, 955 (Haw. Ct. App. 1987). The Regional Development plan applicable to the subject property in the North Shore Sustainable Communities Plan.

The role of the North Shore Sustainable Communities Plan is to maintain the rural character, agricultural lands, open space, natural environment, recreational resources and scenic beauty of O‘ahu’s northern coast, in contrast to more urbanized areas of O‘ahu such as the Primary Urban Center, East Honolulu, Central O‘ahu, and ‘Ewa. In line with the General Plan’s policies to preserve the open space and country atmosphere of the rural areas, **the North Shore Sustainable Communities Plan limits growth to “infill” areas within or adjacent to built-up areas to accommodate existing and future housing and employment needs,** and strives to maintain the region’s population at 1.7 percent of the island-wide population for the year 2025.

See HONOLULU, HI., ORDINANCE 11-3 (2011), hereinafter “North Shore Sustainable Communities Plan” at 1-1, 1-2.

Additionally, the the North Shore Sustainable Communities Plan provides:

The region will remain “country,” with wide open spaces, agricultural lands and rural communities defining the regional landscape, **and growth limited to Hale‘iwa and Waialua Towns.**

Id. at 2-1 (emphasis added).

The North Shore is characterized by vast tracts of agricultural lands, open spaces, and natural and cultural resources. **To protect these resources from development, the Community Growth Boundary was established to guide development and preserve open space and agricultural areas. It has remained fixed since it was first established in 2000, and no new development has occurred outside the Community Growth Boundary.** The Community Growth Boundary has served as a valuable tool to guide resource management, future development or redevelopment within existing zoning designations or future zoning designations, and other standards or guidelines that have been developed in response to plan provisions, other established entitlements, or in accordance with pertinent policy and character described in this plan.

Id. at 2-3 (emphasis added).

[T]he Community Growth Boundary on the North Shore conceptually defines the limits of residential, commercial, industrial, or other similar uses. As no proposals for these types of uses can be considered outside the Community Growth Boundary, this boundary also prevents the encroachment of development onto agricultural lands and open space resources.

Id. at 2-4 (emphasis added).

The successful development of a viable agriculture industry . . . ensures that land designated for agriculture remains in active agricultural production and is not developed for higher value uses (such as housing and commercial development). Like other rural communities, **the North Shore has experienced a steady increase in land values due to a growing demand by individuals seeking a rural lifestyle. With rising land values affecting agriculture's profitability, many landowners have been seeking alternative development schemes that involve higher-intensity uses and greater economic returns, making agricultural lands increasingly vulnerable to nonagricultural development. To minimize the market pressures to subdivide agricultural lands into large-lot, rural-style estates where agriculture is no longer the primary land use, agricultural lands need to be protected and dedicated for agricultural use[.]**

Id. at 3-20, 3-21 (emphasis added).

The North Shore Sustainable Communities Plan also states:

The following policies are applicable to agricultural lands:

Ensure that agriculture is the primary use of agricultural lands. Prohibit the improper use of agricultural lands, including the development or subdivision of agriculturally designated and zoned lands for residential and other nonagricultural uses, unless accessory to agricultural use. Do not allow token farming (i.e., "fake farms") or ranching as a ruse to exploit agricultural land.

Id. at 3-22 (emphasis added).

Clearly this subdivision is not infill, as the subdivision that would be benefiting from the Application is outside the community growth boundary. Also, DRA's EIS indicates that the project will increase the population of Mokuelia by ten percent (10%) and the population of the overall north shore area by one percent (1%). See *EIS* at 4-35. The 70 new houses would also increase the number of households in Mokuleia by ten percent (10%). See *EIS* at 4-34. In an area outside of the community growth boundary, this is a significant change and thus in contravention of the controlling county land use laws. The

regional development plan, having the force and effect of law, clearly mandates that growth of this magnitude should occur **only** within the community growth boundary.

Furthermore, the proposed development is widely regarded as constituting token farming, i.e., “fake farms”, and a review of the EIS and farm plan indicate the vast majority of the land will be used for ranching in the same intensity it is used today, i.e. as a ruse to exploit agricultural land. See *EIS* at 3-20. Because the physical development of the site is controlled by the North Shore Sustainable Communities Plan, which has the force of law, and the proposed development does not comport with its detailed scheme for implementing and accomplishing the development objectives and policies of the general plan,⁶ the proposed groundwater withdrawal is not consistent with the state and county land use plans and the public interest. Hence the use cannot be reasonable-beneficial under HRS § 174C-3 (2017).

C. Petitioner Has Not Met Its Burden Under the Public Trust Doctrine

When public trust purposes are at stake, this Commission cannot sit idly by, but “instead must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decision making process.” *Waiāhole I*, 94 Haw. at 143, 9 P.3d at 455. Under article XI, section 7 of the Hawai‘i State Constitution, the State must take an active and affirmative role in water management; because public trust principles apply to both surface and ground water, “the public trust compels the state duly to consider the cumulative impact of existing and proposed [uses] on trust purposes and to implement reasonable measures to mitigate this impact, including using alternative resources.” *Id.*

1. DRA does not accurately address impacts on other existing legal uses

The Water Code gives preference to existing legal uses in WMAs, requiring that each “*applicant shall establish* that the proposed use of water . . . [w]ill not interfere with any existing legal use of water[.]” Haw. Rev. Stat. § 174C-49(a) (2017) (emphasis added). This affirmative duty on the applicant allows the Commission to make decisions with a level of “clarity [that is] essential where the agency performs as a public trustee and is duty bound to demonstrate that it has properly exercised the discretion vested in it by the constitution and the statute.” *Kukui*, 116 Haw. at 495, 174 P.3d at 334. The Commission “is duty-bound to place the burden on the applicant to justify the proposed water use,” yet the accepted Application contains no information regarding the effects of the proposed use on the thirteen (13) other WUPs issued in the aquifer, including WUPs 1086 and 1091, which are located on an adjacent parcel and were approved by this Commission in July and September 2019 respectively.

⁶ I.e. it is fake farming with “placeholder” crops listed in the Application, everything is subject to the future owners’ whims, and “gentlemen’s ranches” with 2 horses and no agriculture are not prohibited via the use of a deed restriction or agricultural easement.

In fact, on page seven (7) of the Application, DRA does not address any existing legal uses except their own. This is patently insufficient under HRS § 174C-49(a) and does not meet Applicant's burden to justify the proposed use under the public trust. As such, approval of the Application would constitute an abuse of discretion by this Commission, which is duty bound to protect the resource with the level of prudence of a trustee and as such cannot simply grant an incomplete and statutorily deficient application in a ministerial manner.

The interconnectivity and close proximity of Wells 3310-01 and 3310-02 to the existing wells in the Mokuelia Aquifer is undeniable. See *Kukui*, 116 Haw. at 494, 174 P.3d at 333 (wells within one-half mile of each other were the cause of upconing and a rise in chloride levels that risked compromising the wells' potable water). When water is pumped from Wells 3310-01 and 3310-02 it is likely to directly affect the chloride concentrations, and thus the quality of water, in other permitted wells. *Id.* DRA, however, does not address the suboptimal spacing of wells, and thus has not meet its burden as the applicant. Instead DRA has apparently left it to the Commission to investigate for itself to determine if there is sufficient spacing between wells to minimize any potential impact and interference with existing legal uses and on the quality of water currently being taken from the aquifer.

The relatively close proximity of the wells in the aquifer "concentrate[es] pumpage in one spot in the aquifer system" and is likely to result in "localized upconing and interference" which also makes DRA's pumping likely to affect the quantity of water available to the existing legal users as well. See *Kukui*, 116 Haw. at 494, 174 P.3d at 333. DRA appears to believe that allowing additional withdrawals will not threaten the sustainability of the aquifer but does not address the effects of its pumping at all in its grossly deficient application. Currently 7.154 mgd of the aquifer is allocated between sixteen (16) WUPs. Granting DRA's request for 0.417 mgd without substantially reducing its permitted withdrawals on its other existing WUP's, i.e. WUP 779 and 813, would threaten all existing water users by coming dangerously close to the true sustainable yield of the aquifer, risking catastrophic damage from saltwater intrusion into the freshwater lens.

Overpumping the aquifer threatens the composition of the fresh water lens and transition zone, which if compromised, may require wells in the aquifer to be abandoned.⁷ The calculated sustainable yield for Mokuelia Aquifer was, until July 2019, set at 8 mgd,

⁷ The salt water beneath an aquifer is affected by the fresh water lens. As fresh water is withdrawn, the salt water flows upward toward the well. Pumping fresh water decreases the thickness of the lens. The density difference between the two layers drives the salt water upwards in a cone shape towards the fresh water well. Once the cone reaches approximately one-third to one-half the distance from the bottom of the well to the original salt water layer level, well salinization or "upconing" is unavoidable. The salt water cone can be reduced by decreasing the pumping rate. But if the pumping rate fluctuates, over time, the cone will move up and down, increasing mixing salt and fresh water, leading to a larger brackish water transition zone and gradual salinity increase in the well that may require the well to be abandoned.

which was likely already an overestimate due to assumptions in the calculations based on the Robust Analytical Model which assumes optimal well spacing which is clearly not the case here.⁸ The likely overestimation of the sustainable yield calculations coupled with the irreparable damage caused by overpumping make it imperative that the sustainable yield not be approached. DRA provides no details to explain how permitting pumping up to ninety-five percent (95%) of the historically accepted sustainable yield for the aquifer with wells in such close proximity to each other is sustainable in light of the

⁸ The July 2019 State Water Resource Protection Plan (“WRPP”) increased the listed estimated Sustainable Yield for the Mokuleia Aquifer from 8 mgd to 17 mgd based on assumptions that were not made in the 1990 and 2008 WRPP, which may be convenient but do not meet the legal requirement to adopt precautionary principles to protect the trust resource and does not align with USGS hydrologic data on the Mokuleia Aquifer.

Ideally, the sustainable yield of a basal aquifer would be determined through a numerical simulation using a comprehensive three-dimensional flow and transport model. However, the application of a comprehensive model for this purpose requires significant time and money to produce and is difficult to use. Comprehensive numerical model parameters are very complex and are difficult to quantify. Simple analytical models such as RAM and RAM2 are currently more readily applied to estimate sustainable yields for water planning purposes, especially given the complexities of estimating recharge alone. HAWAII WATER RESOURCE PROTECTION PLAN, 2019 update, Appendix F at 64.

Rather than perform the necessary the modeling, the Sustainable Yield for the Mokuleia Aquifer was raised on the assumption that the Wahiawa Aquifer Sector Area (“ASA”) equally spills groundwater from its high level aquifer into the neighboring North ASA and Pearl Harbor ASA, which is then in-turn split between the three (3) Aquifer System Areas (“ASYS”) in the North ASA “based on the length of their borders with the Wahiawa Aquifer System Area.” 2019 Hawai‘i Water Resource Protection Plan, Appendix F at 79-86. This is despite the fact that the water coming from the Wahiawa ASA is not split between the North ASA and Pearl Harbor ASA on the basis of the length of their borders with the Wahiawa ASA, i.e. it is split equally. This assumption is further flawed based on the available scientific research in the Mokuleia ASYS performed by the USGS which has determined that the groundwater level in the Mokuleia ASYS has slowly declined due to groundwater withdrawals and is significantly lower on the western side of the aquifer by approximately five (5) feet, meaning the amount of spillover recharge coming from the Wahiawa ASA is likely significantly lower in the Mokuleia ASYS than the neighboring Waialua and Kawaihoa ASYS, possibly due to dike confinement structures, and not related to the length of boundaries. Thus, upconing and saltwater intrusion is significantly more likely to damage the aquifer when wells are pumped in that western part of the aquifer, i.e. where the subject wells are located. See Geohydrology of the Central O‘ahu, Hawai‘i, Ground-Water Flow System and Numerical Simulation of the Effects of Additional Pumping, Delwyn Oki, 1997, at 46, viewed online at <https://pubs.usgs.gov/wri/1997/4276/report.pdf>.

assumptions used to determine the sustainable yield and the serious consequences of overpumping. Thus DRA does not meet its burden to “establish that the proposed use of water . . . [w]ill not interfere with any existing legal use of water[.]” Haw. Rev. Stat. § 174C-49(a) (2017).

2. DRA does not address impacts on public trust purposes such as traditional and customary Native Hawaiian practices and instream uses

“Under the public trust [doctrine] and the Code, permit applicants have the burden of justifying their proposed uses in light of protected public rights in the resource.” *Kukui*, 116 Haw. at 490, 174 P.3d at 329. Both “water resource protection, including the maintenance of waters in their natural state” and “the exercise of native Hawaiian traditional and customary rights” are protected public trust purposes. *In the Matter of the Contested Case Hearing on Water Use, Well Construction, and Pumping Installation Permit Applications, Filed by Wai’ola O Moloka’i Inc. and Moloka’i Ranch, Limited*, 103 Haw. 401, 429, 83 P.3d 664, 692 (“*Wai’ola*”). “When public trust purposes are at stake, the Commission “must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decision making process” including “consider[ing] the cumulative impact of existing and proposed [uses] on trust purposes and . . . implement[ing] reasonable measures to mitigate this impact, including using alternative resources.” *Waiāhole I*, 94 Haw. at 143, 9 P.3d at 455.

DRA’s Application does not meet its burden of justifying its proposed use with regard to the public trust purposes of water resource protection and the exercise of Native Hawaiian traditional and customary rights. Limu, juvenile fish, ‘opihi, coral, and more all depend on the lower ambient salinity water that is created where ground water is released into the ocean via coastal springs and seeps.⁹ In fact, this Commission has found that ground water delivers nutrients that are a “necessary and integral part of the live food pyramid” that many in the Native Hawaiian population rely on for subsistence activities. *Kukui*, 116 Haw. at 508, 174 P.3d 347. The Hawai’i Water Resources Protection Plan does not account for the needs of these groundwater dependent ecosystems in calculating its Sustainable Yields. See WRPP, Appendix F at 9-10, 64. While further USGS ground water modeling studies must be conducted to determine the groundwater

⁹ The composition of water is very important in nearshore areas. Juvenile fish such as ‘ama ‘ama and āholehole require salinity lower than ambient ocean levels as postlarvae and fingerlings and will abandon an area if the salinity increases too much. If the amount of fresh coastal discharge is lowered, the salinity of the nearshore waters will increase. Juvenile fish also need the sediments and lower visibility that occur in fresh water-salt water mixing zones for protection from larger predators. See FRESH WATER IMPACTS ON HAWAI’I CORAL REEFS, Akala Products Inc., Fisheries Consultants, 2012, pg. 20-22, viewed online at https://data.nodc.noaa.gov/coris/library/NOAA/CRCP/other/grants/Domestic_FMC_CoRIS_Products/NA10NMF4410061_FreshWaterImpacts.pdf.

flows in the aquifer with more certainty, it is well known that withdrawing ground water reduces the amount of water delivered to the nearshore by a one to one ratio.¹⁰

Rather than attempt to meet its burden, DRA provides absolutely no information on the effect of its water withdrawals on Constitutionally protect Native Hawaiian traditional and customary practices. This is a total abdication of its obligation to “demonstrate *affirmatively* that the proposed [use of the] well would not affect native Hawaiian’s rights[.]” *Wai’ola*, 103 Haw. at 442, 83 P.3d at 705 (emphasis in original). Because the Supreme Court has held that it is insufficient to simply point to “the absence of evidence that the proposed use would affect native Hawaiians’ rights[.]” it is clearly “insufficient to meet the burden imposed” where the applicant ignores this obligation entirely, as DRA has done here. DRA must meet this burden before any GWUPA can be accepted in order to allow the Commission to “consider the cumulative impact of existing and proposed [uses] on trust purposes and to implement reasonable measures to mitigate this impact, including using alternative resources.” *Waiāhole I*, 94 Haw. at 143, 9 P.3d at 455.

The Commission must also protect the public trust purpose of maintaining water in its natural state and the Applicant is charged with the burden of showing that its use would not interfere with this public trust purpose. See *Wai’ola*, 103 Haw. at 429, 83 P.3d at 692. DRA has made no attempt to affirmatively show that its changes in use of permitted water and increased withdrawals of water would not affect the nearshore marine environment. DRA’s proposed subdivision and its associated domestic and lot irrigation uses are likely to damage marine life both by reducing groundwater flows that are critical to the nearshore marine ecosystem and also by delivering countless contaminants to the ocean via the groundwater.

Regardless of the source of water, urban land uses contribute to ground water recharge through irrigation water, wastewater recharge, and leakage.¹¹ The porous rock layers then transport the water, and any contaminants, directly into the ocean with the same speed and ease as with ground water from higher in the aquifer.¹² In addition to being the primary source of water for the aquifer, ground water is the largest source of

¹⁰ U.S. Geological Survey Fact Sheet 126-00, Gingerich & Oki, 2000, viewed online at <https://pubs.usgs.gov/fs/2000/126/pdf/fs126-00.pdf>.

¹¹ “Ground water supplies may be vulnerable to contamination due to human-induced and natural conditions. The impacts of contamination can be amplified and facilitated by ground water movement. Chemical leaching and seawater intrusion are two common sources of contamination. Chemical leaching occurs when residual pesticides, petrochemicals, or other contaminants percolate down from upper soil layers into the freshwater lens. Saltwater intrusion occurs when increasingly brackish water infiltrates into the freshwater lens. This can occur due to (1) improper pumping of a production well, or (2) over pumping of the aquifer, or (3) migration of the transition zone inland and/or vertically upward.” See WRPP, Appendix F, at 54.

¹² See *Geochemical Evolution of Hawaiian Groundwater*, Joseph Fackrell, 2016, pg. 68, viewed online at https://www.soest.hawaii.edu/GG/resources/theses/JFackrell_Dissertation.pdf.

nutrient delivery to coastal waters.¹³ Human activity causes phosphates, nitrates and chlorides to enter the ground water.¹⁴ Once these compounds enter the ocean they can cause eutrophication, or nutrient loading, which has wide ranging environmental and cultural effects.¹⁵

The two human sources for these harmful compounds are fertilizer and wastewater.¹⁶ Land uses associated with soil developments and irrigation, such as pasture, orchard, and domestic uses are highly correlated to nutrient and chloride loading.¹⁷ In addition to over-pumping, sodium chloride levels in ground water are also associated with food preservatives from human waste, which are not treated or broken down by septic tanks or water treatment plants due to the high cost of treatment.¹⁸ Wastewater also contains high concentrations of nitrates and phosphates, which seep into the ground water from wastewater treatment plants.¹⁹

Accepting the Application as complete, much less approving the Application, without requiring DRA to affirmatively show that its proposed use, change in use, and increased withdrawals will not damage the Constitutionally protected trust purposes of “water resource protection, including the maintenance of waters in their natural state” and “the exercise of native Hawaiian traditional and customary rights,” *Wai’ola*, 103 Haw. at 429, 83 P.3d at 692, would be a complete abdication of the trustee obligations of this Commission. When public trust purposes are at stake, this Commission cannot sit idly by, but “instead must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decision making process.” *Waiāhole I*, 94 Haw. at 143, 9 P.3d at 455.

IV. DRA ITSELF DEMONSTRATES THAT ITS EXISTING WUPs SHOULD BE REVOKED OR SUSPENDED FOR PARTIAL OR TOTAL NONUSE, PURSUANT TO HAR § 13-171-24(4)

PMH requests that, pursuant to HAR § 13-167-81, the Commission make a declaratory ruling finding that Applicant’s partial or total nonuse was for reasons other

¹³ *Id.* at 69.

¹⁴ *Id.*; Chlorides in Freshwater, Molly Hunt et. al., 2012, pgs. 1-2, viewed online at <http://cels.uri.edu/docslink/ww/water-quality-factsheets/Chlorides.pdf>.

¹⁵ Geochemical Evolution of Hawaiian Groundwater, Joseph Fackrell, 2016, pgs. 68-69, viewed online at https://www.soest.hawaii.edu/GG/resources/theses/JFackrell_Dissertation.pdf.

¹⁶ *Id.*

¹⁷ *Id.* at 84; see Chlorides in Freshwater, Molly Hunt et. al., 2012, pg. 1-2, viewed online at <http://cels.uri.edu/docslink/ww/water-quality-factsheets/Chlorides.pdf>.

¹⁸ Chlorides in Freshwater, Molly Hunt et. al., 2012, pg. 1-2, viewed online at <http://cels.uri.edu/docslink/ww/water-quality-factsheets/Chlorides.pdf>.

¹⁹ Geochemical Evolution of Hawaiian Groundwater, Joseph Fackrell, 2016, pgs. 91-92, viewed online at https://www.soest.hawaii.edu/GG/resources/theses/JFackrell_Dissertation.pdf.

than conservation of the water allowed by DRA's permits and continued for a period of four continuous years or more, and thus, the commission may permanently revoke the permit as to the amount of water not in use, as Applicant's nonuse was not due to extreme hardship caused by factors beyond the its control. In its EIS, DRA admits to its partial or total nonuse for four (4) or more years and concedes that the permits are subject to revocation.

HAR § 13-171-24(4) Provides:

After a hearing, the commission may suspend or revoke a permit for:

Partial or total nonuse, for reasons other than conservation, of the water allowed by the permit for a period of four continuous years or more. The commission may permanently revoke the permit as to the amount of water not in use unless the user can prove that the user's nonuse was due to extreme hardship caused by factors beyond the user's control. The commission and the permittee may enter into a written agreement that, for reasons satisfactory to the commission, any period of nonuse may not apply towards the four-year revocation period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section 13-171-44 shall not apply towards the four-year period of forfeiture. The commission may cancel a permit, permanently and in whole, with the written consent of the permittee. (Emphasis added).

Despite having three (3) WUPs totaling 2.85 mgd, DRA has average monthly withdrawals of 0.3 mgd for the period 2013 through 2019. See *EIS* at 3-17. DRA admits that its Well 3410-01 averages only 0.1 mgd over a period of approximately ten (10) years out of the 0.5 mgd allocated under WUP 813. See *EIS*, Preliminary Engineering Report, Appendix I, at 12. DRA also admits that its Well 3410-03 has averaged only 0.06 mgd over the previous decade out of the permitted 1.50 mgd allocated under WUP 779. *Id.* Most relevantly, [t]he third permitted well on the property with a permit, Well 3310-02, ***has not been used***. *Id.* Pursuant to HAR § 13-167-81, PMH requests that the Commission issue a declaratory order finding that it is necessary to conduct a hearing to determine if DRA's partial and or total nonuse was for reasons other than conservation, and if so, whether DRA "can prove that the user's nonuse was due to extreme hardship caused by factors beyond the user's control."

V. CONCLUSION

As the guardian of the State's water resources, this Commission must use its broad authority and duty to enforce and require compliance with applicable laws. Responsible management demands an immediate response to the issues at hand. There is no other solution. The failure to support public trust purposes and community interests over private commercial use, i.e. real estate development and commercial entertainment venues, violates both the letter and spirit of Hawai'i's State Constitution and Water Code. The Commission must also uphold its legal obligations to Native Hawaiians, to protect the

State's water resources, ensure adequate conservation measures, require efficient water uses, reserve water for future uses, and ensure that all uses, including DRA's, are consistent with the public interest. See Haw. Rev. Stat. § 174C-49(a) (1987).

In the interest of justice, Protect Mokuleia Hui respectfully requests that this Commission reject DRA's WUP Application 1088 as incomplete and insufficient for the reasons stated herein and deny the Application on that basis. PMH further requests that the Commission issue a declaratory order (1) denying DRA's grossly inadequate WUPA No. 1088; (2) ordering that any future WUPA submitted by DRA reflects its current operations, actual water use, future operations, future actual use, and consideration of all relevant portions of the Water Code; (3) finding that irrigating the house lots, landscaping, and horse and livestock paddocks/pastures of the proposed subdivision with potable water is not a reasonable beneficial use, and (4) mandating that DRA participate in a hearing on the revocation of DRA's existing WUPs.

In the alternative, PMH requests that, if the Application is accepted and approved, all other water permits held by DRA or within the subject property, i.e. WUP 813, 776, and 779, be revoked in their entirety or amended to permit no more than the admitted average use from each permitted pump respectively.

Thank you for your consideration of the points of objection raised herein. Should the Commission desire any further information pursuant to HAR § 13-171-19(b), please address all inquiries to the undersigned.

Sincerely,

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